

WHAT IS CLAIMED IS:

1. An optical system comprising:
 - an optical element; and
 - a reference surface which is connected to the optical element, for adjusting the optical element.
2. The optical system according to claim 1, further comprising a body which has the reference surface and which holds the optical element.
3. The optical system according to claim 2, wherein the reference surface is perpendicular to an optical axis.
4. The optical system according to claim 3, wherein the reference surface has a reflecting surface.
5. The optical system according to claim 1, wherein the reference surface is perpendicular to an optical axis.
6. The optical system according to claim 1, wherein the reference surface has a reflecting surface.
7. A projection system that makes first and second planes optically conjugate, comprising the optical system according to claim 1.
8. A projection exposure apparatus that transfers an image of a pattern on a mask onto a substrate, comprising the optical system according to claim 1.
9. An imaging method comprising the steps of:
 - preparing the projection optical system according to claim 7, and
 - forming an image on a first plane onto a second plane with the projection optical system.